

## Claims

1. A communication apparatus comprising:

a multiplexing transmission unit for multiplexing and  
5 transmitting communication data;

an operation monitoring control terminal for monitoring  
said multiplexing transmission unit; and

an IP terminal connected with said multiplexing  
transmission unit by way of a physical interface between said  
10 multiplexing transmission unit and said operation monitoring  
control terminal which said IP terminal shares with said  
operation monitoring control terminal, said IP terminal  
converting a signal inputted to said communication apparatus  
from outside into IP packets, and furnishing them to said  
15 multiplexing transmission unit,

said multiplexing transmission unit multiplexing the IP  
packets furnished thereto from said IP terminal and said  
communication data, and then transmitting them.

20 2. A communication apparatus comprising:

a multiplexing transmission unit for multiplexing and  
transmitting communication data;

an operation monitoring control terminal for monitoring  
said multiplexing transmission unit; and

25 an IP terminal for converting a signal inputted to said  
communication apparatus from outside into IP packets, and for  
furnishing them to said multiplexing transmission unit via  
said operation monitoring control terminal,

said multiplexing transmission unit multiplexing the IP  
30 packets furnished thereto from said IP terminal and said

communication data, and then transmitting them.

3. A communication apparatus comprising:

a multiplexing transmission unit for multiplexing and  
5 transmitting communication data; and

an operation monitoring control terminal for monitoring  
said multiplexing transmission unit,

said operation monitoring control terminal converting a  
signal inputted to said communication apparatus from outside  
10 into IP packets, and furnishing them to said multiplexing  
transmission unit,

said multiplexing transmission unit multiplexing the IP  
packets furnished thereto from said IP operation monitoring  
control terminal and said communication data, and then  
15 transmitting them.